

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/712,681	11/13/2003	Wayne Taylor	8521-000017	9091
27572	7590 04/04/2006		EXAM	INER
HARNESS, DICKEY & PIERCE, P.L.C.		WALBERG, TERESA J		
P.O. BOX 82 BLOOMFIE	8 LD HILLS, MI 48303		ART UNIT	PAPER NUMBER
,			3753	
			DATE MAILED: 04/04/2000	6

Please find below and/or attached an Office communication concerning this application or proceeding.

Inter	view	Sumi	nary

Application No.	Application No. Applicant(s)	
10/712,681	TAYLOR, WAYNE	
Examiner	Art Unit	
Teresa J. Walberg	3753	

·	Teresa J. Walberg	3753	
All participants (applicant, applicant's representative, PTO	personnel):		
(1) <u>Teresa J. Walberg, examiner</u> .	(3)David Hannon, attorney	:	
(2) Gregory Schivley, attorney of record.	(4)		
Date of Interview: 23 March 2006.			
Type: a)⊠ Telephonic b)□ Video Conference c)□ Personal [copy given to: 1)□ applicant 2	²)∏ applicant's representative	·]	
Exhibit shown or demonstration conducted: d) Yes If Yes, brief description:	e)⊠ No.		
Claim(s) discussed: proposed draft claims 1 and 15.			
Identification of prior art discussed: <u>Haglid (6,176,305)</u> .			
Agreement with respect to the claims f)☐ was reached. g	)⊠ was not reached. h)□ N	/A.	
Substance of Interview including description of the general reached, or any other comments: <u>See Continuation Sheet</u> .	nature of what was agreed to	if an agreement	was
(A fuller description, if necessary, and a copy of the amendallowable, if available, must be attached. Also, where no callowable is available, a summary thereof must be attached	opy of the amendments that w		
THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS			

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN A NON-EXTENDABLE PERIOD OF THE LONGER OF ONE MONTH OR THIRTY DAYS FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

Examiner's signature, if required

#### **Summary of Record of Interview Requirements**

#### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

#### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,
  - (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

#### **Examiner to Check for Accuracy**

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

A proposed amendment was discussed. If the final pargraph of the proposed amendment to claim 1 were amended to read: "a flow diverter associated with said transfer port and movable between a venting configuration in which the flow diverter covers and closes said transfer port and opens and allows fluid flow through said exhaust discharge port and a defrost configuration in which the flow diverter covers and closes said exhaust discharge port and in which the flow diverter opens and allows flow through said transfer port to direct said exhaust air into said supply inlet plenum to comingle with said supply air" and the final two lines of proposed new claim 15 were amended to read "port and opening and allowing fluid flow through said exhaust discharge port, said defrost configuration closing said exhaust discharge port and opening and allowing fluid flow through said transfer port" the claims would appear to define over the prior art of record. The prior art does not appear to disclose a device as claimed in which a single door moves between two positions and thereby opens and closes a transfer port and an exhaust discharge port. The Haglid patent shows separate closures for each opening rather than one closure that moves between two openings but would be capable of performing the intended use of opening a flow diverter and closing the exhaust discharge port, the examiner reserves judgment as to whether such an amendment would define over the prior art. While each closure of Haglid has multiple parts, the use of a one part closure is believed by the examiner to be conventional in the art.



Harness Dickey & Pierce PLC
Attorneys and Counselors
5445 Corporate Drive, Suite 400
Troy, Michigan 48098-2583
Phone: 248-641-1600 Fax: 248-641-0270
Metropolitan: Detroit St. Louis Washington, DC

		<u> </u>	
DATE:	March 21, 2006	No. of Pages (Including This Page); 10	
FOR:	Teresa J. Walberg		ORIGINAL WILL FOLLOW BY:
COMPANY:	U.S. Patent and Trademark Office		REGULAR MAIL OVERNIGHT MAIL
FAX No.:	571,273,4790 P	HONE: 571,272,4790	COURIER  WILL NOT FOLLOW
<u> </u>			
FROM:	David W. Hannon		1
	Please let us know by phone or	lax if you do not receive any of	these pages.
COMMENTS:			:
Proposed Am 2:30 p.m. witi	nendment (for discussion purposes only) h G, Gregory Schivley and David Hanno	for telephonic interview sched	uled for March 23, 2006 at
	lo. 10/712,681		
Title:	HEAT RECOVERY VENTILATOR		: 1
			, ;
			•
!	•		; i
			; ;
			,

#### NOTICE

The information contained in this fax transmission is intended only for the individual to whom or entity to which it is addressed. It may also contain privileged, confidential, attorney work product or trade secret information which is protected by law. If the reader of this message is not the intended recipient, or an employee or agent responsible for delivering the message to the addressee, the reader is hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please immediately notify us by telephone and return the original message to us at the address above via the U.S. Postal Service. We will reimburse you for any reasonable expense (including postage) for the return of the original message.

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No.:

10/712,681

Filing Date:

November 13, 2003

Applicant:

Wayne Taylor

Group Art Unit:

3753

Examiner:

Teresa J. Walberg

Title:

HEAT RECOVERY VENTILATOR

Attorney Docket:

8521-000017

## PROPOSED AMENDMENT (FOR DISCUSSION PURPOSES ONLY)

Proposed Amendments to the Claims begin on page 2 of this paper.

Proposed Remarks begin on page 8 of this paper.

P.3

### PROPOSED AMENDMENT (FOR DISCUSSION PURPOSES ONLY)

### PROPOSED AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

#### LISTING OF CLAIMS

1. (Currently Amended) A heat recovery ventilator comprising:

a heat exchanger having discrete inlet and exhaust passageways extending therethrough for providing heat transfer between respective fluids flowing along said inlet and said exhaust passageways;

said inlet passageway providing fluid communication between a supply inlet plenum and a supply discharge plenum having a supply discharge port for discharging supply air;

said exhaust passageway providing fluid communication between an exhaust inlet plenum having an exhaust inlet port and an exhaust discharge plenum;

said supply inlet plenum having a supply port for admitting supply air into said supply inlet plenum;

said exhaust discharge plenum having an exhaust port for discharging exhaust air from said exhaust discharge plenum;

a transfer port between said supply inlet plenum and said exhaust discharge plenum for selectively providing fluid communication therebetween; and,

a flow diverter associated with said transfer port movable between a venting configuration closing said transfer port and allowing fluid flow through said exhaust discharge port and a defrost configuration closing said exhaust discharge port and opening said transfer port to direct said exhaust air into said supply inlet plenum to

Serial No. 10/712,681

### commingle with said supply air.

- 2. A heat recovery ventilator as claimed in claim 1 wherein at least one of said inlet exhaust passageways includes a plurality of individual adjacent passageways.
- A heat recovery ventilator as claimed in claim 2 wherein said 3. (Original) supply inlet plenum, supply discharge plenum, exhaust inlet plenum and exhaust discharge plenum are at least partially defined by a housing containing said heat exchanger.
- A heat recovery ventilator as claimed in claim 3 wherein fluid 4, (Original) flow along said exhaust passageway is augmented by an exhaust fan mounted within one of said exhaust inlet plenum and said exhaust discharge plenum.
- A heat recovery ventilator as claimed in claim 4 wherein fluid flow along said inlet passageway is augmented by a supply discharge fan mounted within said supply discharge plenum.
- A heat recovery ventilator as claimed in claim 5 wherein said 6. exhaust and said supply discharge fans are of similar capacity.

- 7. (Original) A heat recovery ventilator as claimed in claim 6 wherein said exhaust and supply discharge fans share a common fan motor.
- 8. (Original) A heat recovery ventilator as claimed in claim 7 further having an actuator operably connected to said flow diverter for moving said flow diverter between said venting and said defrost configurations.
- 9. (Original) A heat recovery ventilator as claimed in claim 8 wherein said actuator communicates with a controller which causes said actuator to move.
- 10. (Original) A heat recovery ventilator as claimed in claim 9 wherein fluid flow along said exhaust passageway is augmented by an exhaust fan mounted within said exhaust discharge plenum.
- 11. (Original) A heat recovery ventilator as claimed in claim 10 wherein said supply discharge fan is mounted in a supply discharge duct portion of said supply discharge plenum which extends to said supply discharge port and said exhaust fan is mounted in an exhaust discharge duct portion of said exhaust discharge plenum which extends to said exhaust port.
- . 12. (Original) A heat recovery ventilator as claimed in claim 11 wherein said supply discharge, exhaust inlet and exhaust ports are all on a common side of said heat recovery ventilator.

Serial No. 10/712,681

13. (Original) A heat recovery ventilator as claimed in claim 7 wherein said fan motor is mounted within said exhaust inlet plenum.

14. (Original) A heat recovery ventilator as claimed in claim 9 wherein said fan motor is mounted in said exhaust inlet plenum.

### 15. (New) A heat recovery ventilator comprising:

a housing including a supply input plenum, a supply discharge plenum, an exhaust input plenum, and an exhaust discharge plenum, said supply inlet plenum having a supply port defined in said housing for admitting supply air, said supply discharge plenum having a supply discharge port defined in said housing for discharging said supply air, said exhaust inlet plenum having an exhaust inlet port defined in said housing for admitting exhaust air, said exhaust discharge plenum having an exhaust port defined in said housing for discharging said exhaust air;

a heat exchanger disposed within said housing and having discrete inlet and exhaust passageways extending therethrough, said inlet and exhaust passageways providing heat transfer between respective fluids flowing through said heat exchanger, said inlet passageway providing fluid communication between said supply inlet plenum and said supply discharge plenum, said exhaust passageway providing fluid communication between said exhaust inlet plenum and said exhaust discharge plenum;

a dividing wall disposed within said housing between said heat exchanger and said housing, said dividing wall separating said supply inlet plenum and said exhaust discharge plenum and having a transfer port defined therein, said transfer port selectively providing fluid communication between said supply inlet plenum and said exhaust discharge plenum; and,

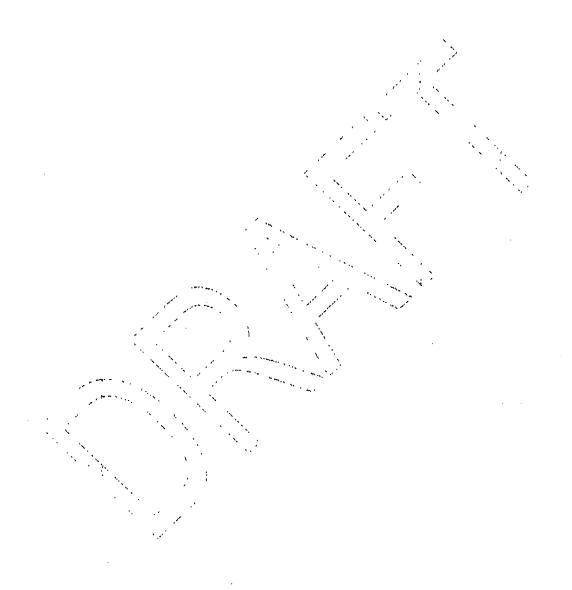
a flow diverter associated with said transfer port and said exhaust discharge port, said flow diverter including a single flap, said single flap movable between a venting configuration and a defrost configuration, said venting configuration closing said transfer

Serial No. 10/712,681 Page 6 of 9

4:40PM

# PROPOSED AMENDMENT (FOR DISCUSSION PURPOSES ONLY)

port and allowing fluid flow through said exhaust discharge port, said defrost configuration closing said exhaust discharge port and opening said transfer port.



#### PROPOSED REMARKS

Claims 1-15 are now pending in the application. Claim 1 is amended herein.

Claim 15 is added herein. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### REJECTION UNDER 35 U.S.C. § 102

4:40PM

MAR.21.2006

Claims 1-6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Haglid (U.S. Pat, No. 6,176,305). This rejection is respectfully traversed.

Claim 1 calls for a heat recovery ventilator including "a flow diverter associated with said transfer port movable between a venting configuration closing said transfer port and allowing fluid flow through said exhaust discharge port and a defrost configuration closing said exhaust discharge port and opening said transfer port to direct said exhaust air into said supply inlet plenum to commingle with said supply air."

Applicant submits that Haglid does not disclose a heat recovery ventilator including a flow diverter having a defrost configuration in which exhaust air is directed into a supply inlet plenum to commingle with supply air.

For example, Haglid discloses a ventilating system having a defrost method in which a set of motorized louvers 70 provided between ducts 18 and 20 are opened and motorized louvers 72 and 74 provided at the entrances to the ducts 18 and 20 are closed to re-circulate exhaust air back through outside air flow passages. See at least Figure 1 and column 6, lines 47-53 of the Haglid reference. As the louvers 72 and 74 for the ducts 18 and 20 of Haglid are both closed in the above example, exhaust air does not commingle with supply air as claimed in the present application. Other defrost

Serial No. 10/712,681 Page 8 of 9

methods disclosed by Haglid include increasing the speed of the exhaust air relative to the outside air through the heat exchanger, stopping or bypassing the intake of outside air through the heat exchanger, and supplying supplemental heat to preheat the outside air before reaching the heat exchanger. See at least column 6, lines 23-46 and 58-65 of the Haglid reference. However, these other defrost methods also fail to disclose the subject matter of claim 1. Accordingly, for at least these reasons, Applicant submits that claim 1 is not anticipated by Haglid.

Claims 2-6 all depend from claim 1 and, therefore, for at least the same reasons, should also be patentable.

Applicant, therefore, respectfully requests reconsideration and withdrawal of this rejection.

Additionally, new claim 15 has been added to provide Applicant with a varied scope of protection for the present invention. Favorable consideration of this claim is also requested.

Serial No. 10/712,681